

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested in view of the above new claims and the forgoing remarks.

The Examiner has rejected claims 53, 54, 55 and 60 Under 35 U.S.C. 103(a) as being obvious in view of U.S. Patent No. 5,893,964 to Claveau in view of U.S. Patent No. 5,308,426 to Claveau.

Claims 53-61 have been canceled without prejudice. New claims 62 and 70 derive from claims 53 and 61 presently on file but present two new features.

Amended claims 63 and 64 correspond, respectively, to claims 54 and 55 presently on file.

Amended claims 65 to 67 correspond to claims 57 to 59 presently on file.

Amended claim 68 corresponds to claim 61 presently on file.

Amended claim 69 corresponds to claim 56 presently on file.

The Examiner states, however, it would have been obvious to one of ordinary skill in the art, looking at US 5308426 (Claveau) at the time of invention, to form the envelope of US 5893964 (Claveau) with a transfer support having the transferable decoration carried directly thereon without the use of the inkers.

We respectfully disagree with the Examiner opinion and believe that amended claims 62-70 are also non obvious as required by 35 USC § 103, as will be explained hereinafter.

First, claims 62 and 70 have been written so that the transfer support is a "substantially gas tight transfer support".

In both of the references to Claveau, both disclose a transfer support or "inker" that is essentially made from "fabric, kittted fabric or a thin sheet of non-woven material as disclosed in column 3 lines 4-5 of the '964 patent or in column 2 lines 8-10 of the '426 patent (this patent also states that the inker is air permeable). In Claveau, to transfer this ink to the artefact being decorated an the process must include an additional envelope surrounding this inker. As described by the Examiner, the transfer method of Claveau involves evacuating or

sucking air from an open end of this envelope. Thus, for this process to work the disclosures of Claveau require an additional envelope surrounding this inker, wherein this additional envelope could not comprise a knitted fabric but rather a gas tight envelope to press the inker onto the object to be decorated.

Thus, with both references to Claveau, the inker and the envelope are not one piece but two separate discrete pieces of different material. This additional material results in additional cost and complexity in operation.

In contrast, the present invention as claimed in claims 62 and 70 relates to a process wherein the transfer support or "inker" acts as the envelope or vice versa, the envelope is formed as a transfer support. Thus, in this case, there is no need for additional, unnecessary materials. Rather the envelope and transfer support are provided all in one. This feature is possible because with the present invention as described in claims 62 and 70 the transfer support is a "substantially gas tight transfer support".

According to claims 62 and 70, the envelope carries out two different tasks. On one hand, the envelope carries the pattern to be transferred directly on an inner side thereof.

Support for this feature is in the specification on page 7 lines 8-10 which reads that vacuum is obtained "directly between the artefact to be decorated and the support" which form the envelope and which carries the pattern.

On the other hand the envelope directly presses the pattern onto the object, when vacuum is obtained inside the envelope. Thus, for this purpose the envelope/ transfer support is formed substantially gas tight wherein the envelope can have an exterior side contacting the external environment. This feature is supported in the specification on page 11, lines 1-7 of the application as filed, which discloses a work bench on which the artefact to be decorated, closed in the transfer support which forms the envelope, rests.

In Claveau, such an envelope, however, is not able to exert the required pressure on the object and for this reason it must be introduced between a couple of elastically deformable membranes.

In this way, the envelope according to the combination of US 5893964 (Claveau) and US 5308426 (Claveau) comprises an outer side which is not in contact with the external environment, but directly contacts the membranes.

The Examiner admits that US 5893964 (Claveau) does not disclose that the pressure is applied to the pattern directly by the transfer support from which the envelope is formed, i.e. the transfer pattern is carried directly upon the transfer support.

US 5308426 (Claveau) teaches to obtain a support for the sublimable ink from a material which is extensible and air-permeable to avoid decoration defects caused by the fact that the known supports - made of paper - do not properly deform when the vacuum is obtained, so creating irregularities in the covering of the object.

Such irregularities are because the paper sheet creases or crumples when it is positioned in a vacuum around the object to be decorated. At the moment of sublimation, these creases are transferred on the surface of the object, thus adversely affecting the quality of the drawing reproduced.

In column 1 of US 5308426 to Claveau the invention is described as overcoming a drawback of the applicants previous application (Ser. No. 07/674,422) disclosing a machine for the transfer by sublimation of a drawing printed on a sheet of paper.

From the front page on US 5308426 (Claveau), it appears that

Ser. No. 07/674,422 corresponds ("same as") to French Application 90.04488 a copy of which is attached for the Examiner's reference.

According to US 5308426 (Claveau) the ink support is made of an extensible air-permeable material such as for example a woven fabric, knitted fabric or sheet of non-woven material. The object, of any shape, is enveloped in the extensible material so that the ink-coated face is directly in contact with the surfaces of the object to be decorated.

Moreover US 5308426 (Claveau) discloses, on column 2, lines 19-22, that "the extensible material is applied without folds or creases on the object when the sublimating machine described in Applicant's aforementioned application (i.e. Ser. No. 07/674,422 corresponding to French Application 90.04488) is placed in a vacuum.

It is, therefore, clear that US 5308426 (Claveau) must be read in conjunction with French Application 90.04488. French Application 90.04488 discloses a machine comprising a fixed frame (1) cooperating with a movable frame (2).

Elastic membranes (3, 4) are also connected to the fixed

frame and the movable frame respectively.

On the periphery of the fixed frame and the movable frame, strips of material similar to that from which the membranes are obtained, are fixed so as to obtain a sealing element which allows the fixed frame and the movable frame to be hermetically closed in contact with each other.

There is also a vacuum pump which creates a vacuum in the region enclosed within the fixed frame and the movable frame. An object to be decorated is wrapped in a support, made for example of paper, with which a sublimable ink is associated, the side of the support carrying the sublimable ink being in contact with the object.

Subsequently, the wrapped object is arranged between the fixed frame and the movable frame. Still subsequently a vacuum is obtained between the fixed frame and the movable frame and the object is heated so as to promote sublimation of the sublimable ink.

When US 5308426 (Claveau), is considered in connection with French Application 90.04488, as suggested by the description of US 5308426 (Claveau), this combination only teaches using a

support having a decorative pattern with the known machine having an existing membrane.

It therefore appears that US 5308426 (*Claveau*) simply stresses the same teaching derivable from US 5893964 (*Claveau*) which, on column 3, lines 3-5, reads that "the inkers 3" are identical and made out of an elastic material, such as fabric, knitted fabric or thin sheet of a non woven material".

US 5308426 (*Claveau*), in fact, if correctly read in connection to French Application 90.04488, does not disclose, nor suggest, to replace the membranes and the inkers with a single support transfer, shaped as an envelope, on the inner side of which the pattern is obtained and which presses the pattern against the object to be decorated when vacuum is created inside the envelope.

US 5308426 (*Claveau*), in fact, simply teaches to replace an inker made of paper, which in use may give rise to creases, with an extensible inker.

In other words, according to the claimed invention in claims 62 and 70, the pressure on the pattern is exerted by means of the support transfer, while according to US 5893964 (*Claveau*), or US

5308426 (*Claveau*), or the combination thereof, the pressure on the pattern is obtained by means of the elastic membranes separate from the inker or transfer support.

Independent claim 62 and 70 have been written to clarify the basic difference with the above references as above disclosed.

It is to be noted that both US 5893964 (*Claveau*) and US 5308426 (*Claveau*) show no alternative to the use of elastically deformable membranes to apply the required pressure to the pattern. Therefore, the applicant believes that claims 62 and 70 are now patentable.

Claims 63-69 depend either directly or indirectly from claim 62 which the applicant believes is allowable. Therefore, the applicant believes that claims 63-69 are allowable as well.

For the reasons mentioned above, it is believed that claims 62-70 are patentable, therefore early allowance of the remaining claims is respectfully requested.

Respectfully submitted,
Italo GOFFI ET AL -1 (CPA)

William C Collard

COLLARD & ROE, P.C. *William* Allison C. Collard, Reg.No.22,592 384/11
1077 Northern Boulevard Edward R. Freedman, Reg.No.26,048
Roslyn, New York 11576 Frederick J. Dorchak, Reg.No.29,298
(516) 365-9802 Attorneys for Applicants

Enclosure:

Fax No. 703-872-9310

I hereby certify that this correspondence is being sent by facsimile transmission to the U.S.P.T.O. to Patent Examiner J. LORENZO at Group No.1734, to 1-703-872-9310 on August 24, 2004.

William C Collard

William Collard